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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/002,404	12/05/2001	Hyun Duk Cho	P-0311	1015

34610 7590 11/17/2004

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EXAMINER

SENF, BEHROOZ M

ART UNIT	PAPER NUMBER
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2613

DATE MAILED: 11/17/2004

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary	Application No. 10/002,404	Applicant(s) CHO ET AL.	
	Examiner Behrooz Senfi	Art Unit 2613	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☐ Responsive to communication(s) filed on ____.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-38 is/are pending in the application.
- 4a) Of the above claim(s) ____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) ____ is/are allowed.
- 6) ☒ Claim(s) 1-4, 6-15, 20-22, 24-28 and 30-34 is/are rejected.
- 7) ☒ Claim(s) 5, 16-19, 23, 29 and 35-38 is/are objected to.
- 8) ☐ Claim(s) ____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on ____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
 Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
 Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All b) ☐ Some * c) ☐ None of:
1. ☒ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. ____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- * See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413)
Paper No(s)/Mail Date. ____. |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152) |
| 3) <input checked="" type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date <u>12/5/2001</u> . | 6) <input type="checkbox"/> Other: ____. |

DETAILED ACTION

Claim Rejections - 35 USC § 102

1. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.

2. Claims 1 – 4, 20, 22 and 24 are rejected under 35 U.S.C. 102(e) as being anticipated by Wen et al (US 6,768,775).

Regarding claim 1, Wen '775 discloses “a video data coding/decoding apparatus” (i.e. fig. 3, abstract lines 1 – 3), and (an encoder dividing a partition partitioned by a data partitioning technique into certain block” (i.e. fig. 3, 30 and 32), and “channel coding the divided block data and transmitting a bit-stream” (i.e. fig. 3, 32, 36, 34 and video data packet” and “a decoder channel decoding the bit-stream” (i.e. fig. 5, decoder 60).

Regarding claim 2, Wen '775 discloses, “encoder divides the partition into a plurality of blocks according to a predetermined block size” (i.e. fig. 3, in as much as applicant has disclosed).

Regarding claim 3, Wen '775 discloses, “encoder performs a channel coding to insert channel coding information into the partitioned partition data with reference to an index of a channel coding rate table” (i.e. fig. 3, col. 5, lines 1 – 45).

Regarding claims 4 and 22, Wen '775 discloses, "coding is performed in the unit of byte" (i.e. col. 2, lines 10 – 15 and col. 4, lines 60 – 61).

Regarding claims 20 and 24, the limitations as claimed are substantially similar to combined limitation of claims 1 – 4, therefore the ground for rejecting claims 1 – 4 also applies here.

Claim Rejections - 35 USC § 103

3. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

4. Claims 6 – 15, 21, 25 – 28, 30 – 34, are rejected under 35 U.S.C. 103(a) as being unpatentable over Wen '775 as applied to claims 1 - 4 above, and further in view of Park et al (US 6,757,851).

Regarding claim 6, Wen '775 teaches, "a variable length coder source coding the video data" (i.e. fig. 3, VLC 32 and 30), and "channel coding the divided block data" (i.e. fig. 3, 32, 36, 34". Although Wen '775 (i.e. fig. 4) teaches video data packet mixing to form a video bit-stream, but fails to more clearly show the mixing of the plurality of partitions. However such features are well known and used in prior art of the record as evidenced by Park '851 (i.e. fig. 2) wherein teaches mixing of the plurality of partitions (partitions 1 and 2 and 3) to form a video bit-stream. Therefore it would have been obvious to one skilled in the art at the time of the invention was made to packetize and multiplex/mixing multiple partitioned video data with different characteristic to form a

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single bit-stream, which would more effectively control the error in multimedia communication (i.e. cols. 3 – 4, lines 58 – 35).

Regarding claim 7, combination of Wen '775 and Park '851 teach, "storing the size information of each partition" (i.e. fig. 2, shows multiple partitions being mixed, therefore the size information of the partitions would be considered and included for mixing) and "a first partition, a header portion" (i.e. fig. 2, header 26, cols. 3 – 4, lines 58 – 35 of Park, and col. 2, lines 9 – 18 of Wen), and (second partition having motion vector information, and third partition having DCT coefficients" (i.e. fig. 4, HDP, MVDP and DDP, col. 2, lines 9 – 18 of Wen), and "byte-alignment" (i.e. col. 4, lines 59 – 61 of wen).

Regarding claim 8, combination of Wen '775 and Park '851 teach, "decoder" (i.e. fig. 5, decoder 60 of Wen) and "de-mixer and channel decoder and restoring the original data" reads on (fig. 5, decoding part, of Wen, and also col. 5, lines 8+ of Park).

Regarding claims 9 and 26, the limitations claimed "variable length coder source coding, and a channel coder channel coding the partition data, and partition mixing" are discussed and covered earlier with respect to claim 6, and as for additional limitation "eliminator checking whether a marker emulation has occurred" please see (i.e. fig. 2, marker 22 and 24 in Park) wherein the predetermined markers checking a mixed (partition, 1 and 2 and partition 3) change (example, partition 1 is different from partition 2, mark it) to mark if they are different.

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Regarding claims 10 and 30, the limitations as claimed “zero bit insertion” is well known in the prior art of the record. It would have been obvious to use zero bit insertion to allow for synchronization and prevent buffer underflow. Official Notice

Regarding claims 11 - 13, the limitations claimed “matching the window (region) in order to avoid a marker emulation” reads on (i.e. fig. 2) wherein the regions 1 – 3 would be (compared or match) for marking.

Regarding claims 14 and 33, combination of Wen '775 and Park '851 teach, “demixing the bit-stream” (i.e. col. 5, lines 8, demultiplexer, Park) and “channel decoder” (i.e. fig. 5, decoder 60 of Wen) and “variable length decoder (VLD)” (i.e. fig. 5, decoder 60 performs variable length decoding).

Regarding claims 15 and 34, the limitations claimed “total bit amount is a bit amount between the markers in case of the partition 1 and 2” would have been obvious. For example fig. 2 of Park shows partition 1 and partition 2, of course the total bit amount is the bit amount between the markers of this two partitions.

Regarding claims 21 and 25, the limitations claimed are substantially similar to claim 7; therefore the ground for rejecting claim 7 also applies here.

Regarding claim 27, combination of Wen '775 and Park '851 teach, “coding is performed in the unit of byte” (i.e. col. 2, lines 10 – 15 and col. 4, lines 60 – 61, Wen).

Regarding claim 28, combination of Wen '775 and Park '851 teach, “performing a channel coding to insert channel coding information into the partitioned partition data with reference to an index of a channel coding rate table” (i.e. fig. 3, col. 5, lines 1 – 45, Wen).

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Regarding claim 31, the limitations claimed are substantially similar to claims 11 and 12; therefore the ground for rejecting claims 11 – 12 also applies here.

Regarding claim 32, combination of Wen '775 and Park '851 teach, "transposing the information bit and the channel coding bit in the partition data when the marker emulation is generated between the data and the marker" (i.e. col. 5 – 6, lines 50 – 35 of Park).

Allowable Subject Matter

5. Claims 5, 16, 17, 18, 19, 23, 29 and 35 - 38, are objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims.

Conclusion

6. Any inquiry concerning this communication or earlier communications from the examiner should be directed to **Behrooz Senfi** whose telephone number is **(703)305-0132**.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, **Chris Kelley** can be reached on **(703)305-4856**.

Any response to this action should be mailed to:

Commissioner of Patents and Trademarks

Washington, D.C. 20231

Or faxed to:

(703) 872-9314

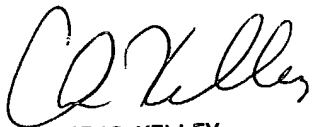
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Hand-delivered responses should be brought to Crystal Park II, 2121 Crystal Drive, Arlington, VA, Sixth Floor (Receptionist).

Any inquiry of a general nature or relative to the status of the application or proceeding should be directed to the Technology Center 2600 Customer Service Office whose telephone number is (703) 306-0377.

B. S. B. S.

11/11/2004


CHRIS KELLEY
SUPERVISORY PATENT EXAMINER
TECHNOLOGY CENTER 2600